Atty. Docket No. KIK01 P-322

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

2863

Examiner

Xiuquin Sun

Applicant

Kenichiro Kobayashi

Appln. No.

09/838,905

Filing Date

April 20, 2001

Confirmation No.

1673

For

METHOD AND APPARATUS TO MEASURE AMOUNT OF

MOVEMENT USING GRANULAR SPECK PATTERN

GENERATED BY REFLECTING LASER BEAM

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

RESPONSE

In response to the Office Action mailed December 2, 2002, Applicant responds as

follows.

ENTER UPON

NOTICE OF APPEAL

In the Claims:

Please amend claims 3, 9, 13 and 15 as follows.

504/1400

3. (Amended) The apparatus as defined in claim 2 and further including a light shield positioned in front of said line sensor.

9. (Amended) The apparatus as defined in claim 8 and further including a light shield and supplies are supplies and suppli

01 FC: 1254 110.00 CH

13. (Twice Amended) A lensless apparatus for measuring the amount which an object to be measured has moved in a plane and back and forth using a granular speck pattern generated by a reflecting laser beam, said apparatus comprising:

a collimated light source for generating a granular speck pattern corresponding to the surface of an object to be measured;

a line sensor positioned to detect directly without a lens said granular speck pattern as an index; and